CWIN
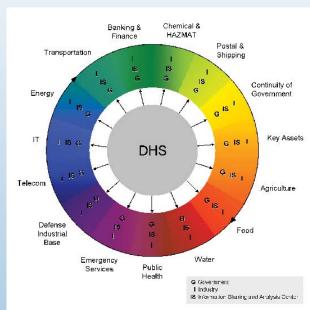## Critical infrastructure Warning Information Network

In This Issue

CWIN Set to Expand

CWIN has taken on the crucial mission of protecting our Nation's critical infrastructures. Since CWIN's conception in 2000, it has been a cyber-centric alert and warning network. Now CWIN is evolving to encompass all 15 critical infrastructure sectors as identified in the President's National Strategy for the Physical Protection of Critical Infrastructures and Key Assets (see figure). This expansion of CWIN's mission reflects the commitment of the Department of Homeland Security to protect the Nation's critical infrastructures.

CWIN already has a strong backbone in the information technology (IT) and telecommunications

The 15 critical infrastructure sectors

New Conference Bridge Feature

As part of our ongoing commitment to technology evolution, NCS is pleased to announce the addition of a conferencing solution, the Compunetix Mini-Contex® conference bridge, to the CWIN architecture.

The Compunetix Mini-Contex is a rack-mountable audio conferencing solution that provides 96-port audio conferencing capacity. It offers expansion capabilities, full functionality and support for all conferencing call types. In addition, it is manufactured to ISO 9000 and Mil-Std-55110 standards, exceedingly high standards that guarantee the quality of the equipment and its performance capabilities. The Mini-Contex runs on a Unix platform, enhancing its reliability over other operating system-based conference bridges and reducing susceptibility to viruses.

CWIN's new conference bridge

Providing
Solutions for
Communications
Reliability

The Mini-Contex supports multiple levels of end users and includes:

- Fully automated and agent-attended conference calls

- End-user scheduling via browser and popular groupware calendar programs

- End-user conference viewing and control via web browsers

- E-mail and fax notifications of scheduled conferences

- Remote administration and maintenance

The Mini-Contex provides a "Secure Blast Dial-out" option, which is a preset dial-out audio-conference with added security. All sites/users are automatically connected and then prompted for a pass code, thus eliminating the possibility of having unauthorized individuals participating in the conference. In addition, it provides the ability to bar unauthorized users who attempt to join the call.

The Mini-Contex allows the administrator to select among various types of conference calls, including Meet-Me, On-Demand, Reserved Unattended, Preset, Chairperson Progressive and Operator-Assisted. Other options include the ability to sub-conference, conduct question and answer sessions and hold voting sessions. Conferences can be reserved, created, controlled and modified using simple touch-tone commands or using a standard Web browser.

The Mini-Contex contains significant security features designed to prevent unwanted intrusion, limit participation in sensitive conferences, and even contains a conference-level pass code feature, allowing conference hosts to create, mid-call, a second-level pass code for entry into an unattended conference. Authorized conferees can mute or un-mute themselves by pressing a configurable key sequence. When a conferee is muted, no one else participating in the conference can hear that conferee speak.

We look forward to enhancing your CWIN experience with this upgrade, and will keep you posted as new technologies present further opportunity for improving CWIN!

The Emerging Role of VoIP

Voice over Internet Protocol, the technology used in the CWIN network, is gaining a greater role in communications. Government agencies and universities are the biggest users of VoIP technology to date. While cost savings are important to these organizations, the ability to converge voice and data on the same network has the greatest advantage. For example, in 2003, the Commerce Department combined 13 data networks and 130 separate telephone networks into a single IP network. The US military uses VoIP for certain applications because voice networks are easier to deploy in the field and have greater portability. VoIP serves the military in more than just operations: IP networks are in use in Iraq to boost morale by allowing personnel to contact their friends and families through e-mail, video conferencing, and voice.

VoIP has many benefits. For businesses, the central administration of a VoIP system lowers the labor costs involved in making system moves, adds, and changes. This is coupled with the lower cost of bandwidth. VoIP systems also provide greater flexibility, applications, and customization. For the home user, too, VoIP is often a lower cost solution. Service for the home user combines local calling, long distance, voice mail, and Internet access, usually for one low price.

VoIP service for home and business is growing. Various market reports have estimated that there are about 100,000 VoIP users in the United States, and that figure is expected to grow dramatically in the next few

Why Thinner is Better—
Thin Client Versus Traditional PC

All CWIN users are equipped with the same standard set of equipment: a VoIP phone, a thin client, and a printer. The NCS selected thin clients rather than personal computers (PCs) for several reasons. Thin clients offer a relatively small desk footprint, network flexibility, ease of maintenance and, best of all, enhanced security without compromising network capabilities.

Unlike the typical tower PC, the thin client is a computer that runs applications from a remote server location, and stores nothing "locally" (such as on the local C: Drive or "My Documents"). With thin clients, while users can save documents to the "My Documents" folder, the documents actually reside on the central server). The thin client downloads the program from the server, but all processing, programs and data are stored on the server. This solution is the superior CWIN choice for several reasons.

Small Footprint

Typically, thin clients have a smaller physical footprint than traditional PCs and occupy approximately a third the space

CWIN's thin client

occupied by a typical tower PC. This leaves more room for other hardware, which is a must in Network Operating Centers (NOCs) or office locales where space is at a premium.

Network Flexibility and Ease of Management

The CWIN thin client network runs the Microsoft XPEmbedded operating system. This operating system can be reconfigured, reloaded, replaced, or updated by the network administrator from the data hubs. Applications and data are deployed, managed, supported, and executed completely

on the server. Service patches and other network improvements can be pushed to the thin clients at a fraction of the time it would take to upgrade an equivalent tower-based network, since network administration is accomplished once the new software is loaded on the appropriate server.

Strengthened Security

Thin client networks offer several security features that are critically important for CWIN. As noted earlier, no data is present on the thin client desktop: all user data resides on remote servers. If the terminal is stolen or destroyed, there is no data loss or damage. User profiles are not stored on the thin client; rather, they are created upon logon and deleted at logoff. These features are integral to the CWIN security posture.

The thin client CWIN station offers the same capabilities and functionality of a traditional PC and has the added benefit of contributing to easier network maintenance and security, an ideal combination for users and manager alike.
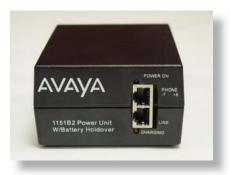
sectors. It numbers more than 60 members, including 18 Government entities and more than 40 industry representatives. CWIN's expanded mission will require it to reach out and more effectively connect 13 additional critical sectors. This connectivity will enable CWIN to serve as the vehicle that ties together key Government lead agencies, industry partners and Information Sharing and Analysis Centers (ISACs), enabling intra-sector and inter-sector collaboration, sharing and notification in a private, reliable network. It will provide Government and industry with a unique collaborative tool that can serve the Nation's industry and Government decision-makers with vital connectivity to conduct emergency alerting, planning and execution before disaster strikes, and continuity of operations when other communications tools have failed.

The broad-based communication link running through all critical sectors will strengthen CWIN's capabilities and enhance the protection of the Nation's critical infrastructures.

Phone Junction, What's Your Function?

Between your workstation phone and the wall is a junction box, which serves as the connecting point between the phone, the CWIN network, and the power source. If you ever lose connectivity to the network, it is important that you check this box before contacting the Service Management Center (SMC).

The junction box is most often placed on the floor. Although this is a convenient place, it can often lead to problems with the phone set. The junction box can easily be kicked, causing one or all three cords attached to the box to be dislodged. It is also important that the junction box be located safely away from water. Though this might be an odd warning for office equipment, a junction box can easily short circuit if exposed to any liquids, including rainwater or, more likely, an ambitious cleaning person wielding a vigorous mop (really, it's happened!).

CWIN's junction box

years. New companies have formed to offer VoIP solutions for home and business users and traditional telecommunications companies are not far behind. At the end of 2003, a number of telecommunications and even cable companies announced plans to offer VoIP service.

Though VoIP use has many benefits, it also has its challenges. The large initial investment of setting up a VoIP system might be prohibitive for some businesses. Technical issues, such as connecting with public 911 systems and disability access, still need to be resolved. Since IP represents the convergence of voice and data, it presents certain difficulties with regard to regulation and taxation.

To begin to address regulatory issues, the Federal Communications Commission (FCC) held its first VoIP forum in December 2003. In February 2004, the FCC recommended that Internet services should continue to be subject to minimal regulation. In addition, the FCC is initiating proceedings to address the technical issues associated with law enforcement access to VoIP services.

NCS chose VoIP technology, with its high reliability and security, to power the voice side of CWIN. It has been proven to be a reliable and robust communication method, and one that is increasingly important in the communications arena.

National Communications System

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Technical Support: Service Management Center (SMC)

VoIP Phone Ext: 4357 (HELP)
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Important Dates

Monthly Tests - 3rd Monday of each month

24/7 Help Desk
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